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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/688,360  | 10/12/2000  | Kazuo Aisaka         | XA-9375             | 5849             |
| 181   | 7590        | 04/20/2005           | EXAMINER            |                  |
| MILES & STOCKBRIDGE PC<br>1751 PINNACLE DRIVE<br>SUITE 500<br>MCLEAN, VA 22102-3833 |             |                      | LI, ZHUO H          |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2189                |                  |

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|------------------------------|------------------------|---------------------|
|                              | 09/688,360             | AISAKA ET AL.       |
| Examiner                     | Zhuo H Li              | Art Unit<br>2189    |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1,3,4,6-10,12,13 and 15-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 1 and 3 is/are allowed.

6)  Claim(s) 4, 6-10, 12, 13 and 15-23 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office action is in response to the amendment filed 5/27/2004. Accordingly, claims 2, 5, 11 and 14 are cancelled and claims 1, 3-4, 6-10, 12-13 and 15-23 are pending for examination.

### ***Claim Rejections - 35 USC § 112***

2. Claims 16-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art to which it pertains, or with which it is most nearly connected to make and or use the invention.

In this case, claims 16 and 19 each recite, “an operating system” or “a computer system” allocating resources for the program unit for ensuring that an entry address of a cache memory to be used for the principal part of the program unit differs from an entry address of the cache memory used for the principal part of one of the plurality of program units other than the program unit when the computer runs one of the program units. Note a claim, which recites, solely, a single “means” as its function(s) is subject to an undue breadth rejection under U.S.C. 112, first paragraph. *In re Haytt*, 708 F.2d 712, 218 USPQ 195 (Fed. Cir. 1983). Thus, Claims 16 and 21 are rejected under 35 U.S.C. 112, first paragraph, while being as single means claims.

Claims 17-18 and 20-21 are also rejected because of depending on claims 16 and 21, respectively, containing the same deficiency.

3. Claims 4-9, 10, 12-13, 15 and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 4, 10, and 13, the phrase “any” renders the claim vague and indefinite because the phrase “any” has an alternate meaning, which does not positively identify the claimed limitations.

Regarding claims 9 and 22-23, the phrase “some” renders the claim vague and indefinite because the phrase “some” does not clearly specify the quantity, which does not positively identify the claimed limitations.

Claims 6-9, 12, 15, and 22-23 are also rejected because of depending on rejected based claims containing the same deficiency.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parady (US PAT. 6,408,368) in view of Gruber et al. (US PAT. 6,115,793 hereinafter Gruber).

Regarding claim 16, Parady discloses an operating system as shown in figure 5 for controlling a computer system to run a plurality of program units concurrently (col. 4 lines 10-14), wherein the operating system allocating resource for the program unit when the computer system runs one of the plurality of program units (col. 5 line 8 through col. 6 line 6). Parady differs from the claimed invention in not specifically teaching the operating system ensuring that an entry address of a cache memory to be used for the principal part of the program unit differs from an entry address of the cache memory used for the principal part of one of the plurality of program units other than the program unit. However, Gruber teaches a cache memory system, which minimizes the latency and latency uncertainty of data memory access by maintaining an index to the physical cache that is separate and distinct from the logical index associated with the requests that caused conflict (abstract and col. 6 line 63 through col. 8 line 16), thereby ensuring the entry address of the cache memory to be used for the principal part of one of the plurality of program units other than the program unit. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Parady in having the operating system ensuring that an entry address of a cache memory to be used for the principal part of the program unit differs from an entry address of the cache memory used for the principal

part of one of the plurality of program units other than the program unit, as per teaching of Gruber, because it minimizes the latency and latency uncertainty of data memory access.

Regarding claim 17, Parady teaches the allocating resource being executed by means of resource allocation included in the operating system (col. 11 lines 5-18).

Regarding claim 18, Parady teaches the operating system being stored into storage of the computer system (col. 5 lines 8-16).

Regarding claim 19, the limitations of the claim are rejected as the same reasons set forth in claim 16.

Regarding claim 20, the limitations of the claim are rejected as the same reasons set forth in claim 17.

Regarding claim 21, the limitations of the claim are rejected as the same reasons set forth in claim 18.

#### ***Allowable Subject Matter***

6. Claims 1 and 3 are allowed.
7. Claims 4, 6-10, 12, 13, 15 and 22-23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

#### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1, 3-4, 6-10, 12-13 and 15-23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhuo H Li whose telephone number is 571-272-4183. The examiner can normally be reached on M-F 9:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zhuo H. Li 

Patent Examiner  
Art Unit 2189



MATTHEW D. ANDERSON  
PRIMARY EXAMINER